

**WHAT IS CLAIMED IS:**

1. A method for recognizing a substrate stock in the environment of light-sensitive sensors within a printing unit, comprising: sensing several ranges of light wavelengths that are recognized by a sensor.

2. The method according to Claim 1, wherein the sensor (3) in the ranges of light wavelengths recognizes radiation preferably in the ranges of light wavelengths that can be assigned to the colors red, green, and blue.

3. The method according to Claim 1, wherein the radiation measured by the sensor (3) is automatically assigned a color value within a color area.

4. The method according to Claim 3, wherein the assigned color value is compared with a reference value which represents the color value of the surface on which the substrate stock is to be recognized.

5. The method according to Claim 4, wherein the reference value is ascertained by the sensor (3) through a measurement of the light reflected or transmitted through the surface on which the substrate stock is to be recognized during a no-load operation of the printing unit without substrate stock, at every re-start.

6. The method according to Claim 4, wherein, on deviation  $\Delta E$  of the assigned color value from the reference value, an alarm is triggered and, if necessary, at least the affected area of the printing unit is stopped whenever the deviation  $\Delta E$  exceeds a previously determined threshold value S.

7. The method according to Claim 4, wherein measurement of the color values and the reference values takes place in reflection.

8. Device for recognizing a substrate stock on a surface in the environment of a light-sensitive sensor inside a printing unit comprising: at least one light-sensitive sensor with several channels sensitive to various light wavelengths.

9. Device according to Claim 8, wherein said color sensor (3) shows at least three channels for measuring in various ranges of light wavelengths that are assigned to the colors red, green, and blue.

10. Device according to Claim 9, further including a light source (16), preferably of white light, is kept ready in the environment of the sensor in such a way that a ray of light (17) emitted by it falls overwhelmingly into the available light-sensitive sensor after reflection or transmission through the surface on which the substrate stock is to be recognized.

11. Device according to Claim 10, further including at least one CPU and at least one storage facility for comparison of the assigned color value with a reference value.

12. Device according to Claim 8, wherein the surface on which the substrate stock is to be recognized shows a color value that deviates from the color values possible for the substrate stock by at least the threshold value S.

13. Device according to Claim 12, wherein the surface on which the substrate stock is to be recognized shows a color value that deviates from the colors that the printing unit can produce with printing inks preferably by approximately the threshold value.

14. Device according to Claim 8, wherein the light-sensitive sensor (3) is held ready in the environment of a surface that is outside the conveyance sequence for the substrate stock.